

REMARKS

In the first Office Action, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a) as not showing every feature specified in the claims; rejected claims 1-3, 5-10, and 12-15 under 35 U.S.C. § 102(e) as anticipated by TROXEL (U.S. Patent No. 6,185,210); rejected claim 4 under 35 U.S.C. § 103(a) as unpatentable over TROXEL in view of Applicants' admitted prior art; and rejected claim 11 under 35 U.S.C. § 103(a) as unpatentable over TROXEL in view of MAKRUCKI (U.S. Patent No. 6,208,622).

By way of the present amendment, Applicants propose amending Figure 1. Applicants further add new claims 16-22. No new matter has been added by way of the present amendment. Claims 1-22 are pending.

At the outset, Applicants filed an Information Disclosure Statement on July 30, 2002. The Examiner, however, did not return an initialed Form-1449 to Applicants to indicate that the documents cited in the Information Disclosure Statement have been considered. Applicants respectfully request that the Examiner properly consider the documents cited in the Information Disclosure Statement, initial the Form-1449 (a copy of which is attached herewith), and return a copy of the initialed Form-1449 to Applicants.

The drawings were objected to under 37 C.F.R. § 1.83 as allegedly not showing every feature specified in the claims. In particular, the Examiner alleged that the plurality of guaranteed bandwidth buckets must be shown or the feature(s) canceled from the claims (Office Action, pg. 1). Applicants propose amending Fig. 1 of the present application herewith to depict that input ports 102 include a plurality of first buckets 130a, a plurality of second buckets 130b, and a plurality of third buckets 130c. Applicants respectfully request that the Examiner enter the

Amendments to the Drawings:

Applicants propose amending Figure 1 to depict that token system 110 may be associated with a plurality of first (maximum) buckets 130a, a plurality of second (guaranteed) buckets 130b, and a plurality of third (shared) buckets 130c.

Attachment: Replacement Figure 1

proposed drawing correction and withdraw the objection to the drawings.

For at least the foregoing reasons, Applicants respectfully request that the objection to the drawings be reconsidered and withdrawn.

Claims 1-3, 5-10, and 12-15 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by TROXEL. Applicants respectfully traverse.

A proper rejection under 35 U.S.C. § 102 requires that a reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. TROXEL does not disclose or suggest the combination of features recited in claims 1-3, 5-10, and 12-15.

For example, independent claim 1 recites a method for allocating bandwidth in a network appliance, where the network appliance includes a plurality of guaranteed bandwidth buckets used to evaluate when to pass traffic through the network appliance. The method includes providing a shared bandwidth bucket associated with a plurality of the guaranteed bandwidth buckets; allocating bandwidth to the shared bandwidth bucket based on the underutilization of bandwidth in the plurality of guaranteed bandwidth buckets; and sharing excess bandwidth developed from the underutilization of the guaranteed bandwidth allocated to the individual guaranteed bandwidth buckets including borrowing bandwidth from the shared bandwidth bucket by a respective guaranteed bandwidth bucket to allow traffic to pass immediately through the network appliance. TROXEL does not disclose or suggest this combination of features.

For example, TROXEL does not disclose or suggest allocating bandwidth to the shared bandwidth bucket based on the underutilization of bandwidth in the plurality of guaranteed bandwidth buckets. The Examiner relied on col. 15, line 57, to col. 16, line 67, and col. 17, lines

1-57, of TROXEL for allegedly disclosing this feature (Office Action, pg. 2). Applicants disagree.

At col. 15, line 57, to col. 16, line 67, TROXEL discloses the use of token buckets 1, 3, and 4 (Fig. 8) for performing policing. TROXEL discloses that buckets 1 and 3 are associated with the arrival of a flow from interface IN, before the point where the packets are replicated/switched, and bucket 4 is associated with flows being sent out of interface OUT (col. 16, lines 23-29). This section of TROXEL in no way discloses or suggests allocating bandwidth to a shared bandwidth bucket based on the underutilization of bandwidth in a plurality of guaranteed bandwidth buckets, as required by claim 1. In fact, this section of TROXEL in no way relates to allocating bandwidth.

At col. 17, lines 8-51, TROXEL discloses two-stage policing where packets that are determined to be conforming in first stage token buckets 60 are again tested in second stage token bucket 68 (Fig. 10). This section of TROXEL further discloses a group of token bucket parameters that includes r , which is the number of bytes per second to be added to the bucket (col. 17, lines 37-45). This section of TROXEL in no way discloses or suggests allocating bandwidth to a shared bandwidth bucket based on the underutilization of bandwidth in a plurality of guaranteed bandwidth buckets, as required by claim 1. In fact, this section of TROXEL in no way relates to allocating bandwidth. If this rejection is maintained, Applicants request that the Examiner specifically point out where in any of the above sections, or elsewhere, TROXEL discloses allocating bandwidth to a shared bandwidth bucket based on the underutilization of bandwidth in a plurality of guaranteed bandwidth buckets.

TROXEL does not further disclose or suggest sharing excess bandwidth developed from

the underutilization of the guaranteed bandwidth allocated to the individual guaranteed bandwidth buckets including borrowing bandwidth from the shared bandwidth bucket by a respective guaranteed bandwidth bucket to allow traffic to pass immediately through the network appliance, as also required by claim 1. The Examiner relied on col. 15, line 57, to col. 16, line 67, and col. 17, lines 1-57, of TROXEL for allegedly disclosing this feature (Office Action, pg. 2). Applicants disagree.

As set forth above, at col. 15, line 57, to col. 16, line 67, TROXEL discloses the use of token buckets 1, 3, and 4 (Fig. 8) for performing policing. TROXEL discloses that buckets 1 and 3 are associated with the arrival of a flow from interface IN, before the point where the packets are replicated/switched, and bucket 4 is associated with flows being sent out of interface OUT (col. 16, lines 23-29). This section of TROXEL in no way discloses or suggests sharing excess bandwidth developed from the underutilization of the guaranteed bandwidth allocated to the individual guaranteed bandwidth buckets including borrowing bandwidth from the shared bandwidth bucket by a respective guaranteed bandwidth bucket to allow traffic to pass immediately through the network appliance, as required by claim 1. In fact, this section of TROXEL in no way relates to sharing excess bandwidth.

At col. 17, lines 8-51, TROXEL discloses two-stage policing where packets that are determined to be conforming in first stage token buckets 60 are again tested in second stage token bucket 68 (Fig. 10). This section of TROXEL further discloses a group of token bucket parameters that includes r , which is the number of bytes per second to be added to the bucket (col. 17, lines 37-45). This section of TROXEL in no way discloses or suggests sharing excess bandwidth developed from the underutilization of the guaranteed bandwidth allocated to the

individual guaranteed bandwidth buckets including borrowing bandwidth from the shared bandwidth bucket by a respective guaranteed bandwidth bucket to allow traffic to pass immediately through the network appliance, as required by claim 1. In fact, this section of TROXEL in no way relates to sharing excess bandwidth. If this rejection is maintained, Applicants request that the Examiner specifically point out where in any of the above sections, or elsewhere, TROXEL discloses sharing excess bandwidth developed from the underutilization of the guaranteed bandwidth allocated to the individual guaranteed bandwidth buckets including borrowing bandwidth from the shared bandwidth bucket by a respective guaranteed bandwidth bucket to allow traffic to pass immediately through the network appliance.

For at least the foregoing reasons, Applicants submit that claim 1 is not anticipated by TROXEL.

Claims 2, 3, 5-10, 12, and 13 depend from claim 1. Therefore, these claims are not anticipated by TROXEL for at least the reasons given above with respect to claim 1. Moreover, these claims recite additional features not disclosed or suggested by TROXEL.

For example, claim 7 recites that the traffic shaping policy screens based on IP address. The Examiner relied on col. 17, lines 8-51, of TROXEL for allegedly disclosing this feature (Office Action, pg. 3). Applicants disagree.

As set forth above, col. 17, lines 8-51, of TROXEL discloses two-stage policing where packets that are determined to be conforming in first stage token buckets 60 are again tested in second stage token bucket 68 (Fig. 10). This section of TROXEL further discloses a group of token bucket parameters that includes mtu, which is the maximum packet size (IP length) in bytes (col. 17, lines 37-48). This section of TROXEL in no way discloses or suggests a traffic

shaping policy that screens based on IP address, as required by claim 7. In fact, this section of TROXEL does not even mention an IP address. If this rejection is maintained, Applicants request that the Examiner specifically point out where in this or any other section of TROXEL, a traffic shaping policy that screens based on IP address is disclosed.

For at least these additional reasons, Applicants submit that claim 7 is not anticipated by TROXEL.

Claims 8 and 9 recite that the traffic shaping policy screens based on an IP source address and an IP destination address, respectively. The Examiner relied on col. 11, line 11, to col. 12, line 2, of TROXEL for allegedly disclosing these features (Office Action, pg. 3). Applicants disagree.

At col. 11, line 11, to col. 12, line 2, TROXEL discloses that a forwarding module performs the following functions: encapsulation and forwarding of data packets, de-encapsulation and delivery of received data packets, monitoring data flows, and policing data flows. This section of TROXEL in no way discloses or suggests a traffic shaping policy that screens based on an IP source address or an IP destination address, as required by claims 8 and 9, respectively. In fact, this section of TROXEL does not disclose or suggest an IP source address or an IP destination address. If these rejections are maintained, Applicants request that the Examiner specifically point out where in this or any other section of TROXEL, a traffic shaping policy that screens based on an IP source address and an IP destination address is disclosed.

For at least these additional reasons, Applicants submit that claims 8 and 9 are not anticipated by TROXEL.

Independent claims 14 and 15 recite features similar to features recited above with

respect to claim 1. Therefore, Applicants submit that these claims are not anticipated by TROXEL for reasons similar to reasons given above with respect to claim 1.

Claim 4 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over TROXEL in view of Applicants' admitted prior art. Applicants respectfully traverse this rejection.

Claim 4 depends from claim 1. The alleged admitted prior art does not remedy the deficiencies in the disclosure of TROXEL set forth above with respect to claim 1. Therefore, Applicants submit that claim 4 is patentable over TROXEL and the alleged admitted prior art, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

Claim 11 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over TROXEL in view of MAKRUCKI. Applicants respectfully traverse this rejection.

Claim 11 depends from claim 1. The disclosure of MAKRUCKI does not remedy the deficiencies in the disclosure of TROXEL set forth above with respect to claim 1. Therefore, Applicants submit that claim 11 is patentable over TROXEL and MAKRUCKI, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

New claims 16-22 recite features that are not disclosed or suggested by the art of record. For example, independent claim 16 recites a network device that includes a first bucket configured to store tokens, a second bucket configured to store tokens, and a scheduler. The scheduler is configured to determine if a size of traffic received at the network device exceeds a number of tokens stored in the first bucket, and transfer, when the size of the traffic exceeds the number of tokens stored in the first bucket, an appropriate number of tokens from the second

bucket to the first bucket so that the first bucket includes a number of tokens that equals or exceeds the size of the traffic. The art of record, whether taken alone or in any reasonable combination, does not disclose or suggest this combination of features.

Claims 17-19 depend from claim 16. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 16.

Independent claim 20 recites a method that includes receiving traffic; determining if a policy is to be applied to the traffic; determining, when a policy is to be applied to the traffic, if a size of the traffic exceeds a number of tokens in a first bucket, the first bucket being associated with the policy; determining, when the size of the traffic exceeds the number of tokens in the first bucket, if a second bucket includes an appropriate number of tokens that, when added to the number of tokens in the first bucket, would equal or exceed the size of the traffic; transferring the appropriate number of tokens from the second bucket to the first bucket when the second bucket includes the appropriate number of tokens; and forwarding the traffic after the transferring. The art of record, whether taken alone or in any reasonable combination, does not disclose or suggest this combination of features.

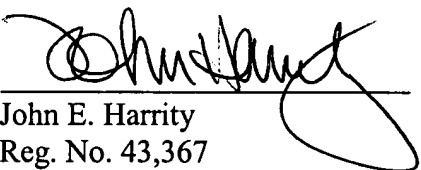
Claims 21 and 22 depend from claim 20. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 20.

In view of the foregoing amendment and remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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